Claims

[c1] 1.A portable fax machine, comprising:

a pen-based input device, comprising a writing pen and a writing pad, enabling a user to write documents for fax transmission on the writing pad by means of the writing pen, wherein said input device is capable of generating data representative of the moving trace of the pen-based input device and of recording a user"s written input in a strokes data format, each stroke comprising a series of position coordinates of pen-based input device between a pen-down event and a pen-up event;

an encoder for transferring the stroke format data representative of the moving trace of the writing pen into fax data format;

a dialer for inputting the fax number of a destination to set up a connection herewith; and

fax transmission device for transmitting to the destination the data in the fax data format output from the encoding means.

2.A portable fax machine according to claim 1, wherein said pen-based input device is a general handwriting digitizer.

3.A portable fax machine according to claim 1, wherein said pen-based input device is a device integrating a handwriting digitizer with a traditional paper-based record making system.

4.A portable fax machine according to claim 1, wherein said encoding means comprises a data filter and a format generator, the data filter for filtering the data generated by the pen-based input device to extract the stroke data represented by x and y coordinates, and the format generator for transferring the stroke data into data in the standard fax data format by interpolating, sorting and encoding.

5.A portable fax machine according to claim 4, wherein said format generator batch processes the blank lines between non-blank lines during the encoding procedure.

[c2]

[c3]

[c4]

[c5]

[c8]

[c9]

[c10]

[c6] 6.A portable fax machine according to claim 1, wherein said dialing means is provided in the writing pad in the form of a keyboard.

[c7] 7.A portable fax machine according to claim 1, wherein said dialing means is provided in the writing pad in the form of a software-defined dialing area comprising selectable buttons displayed in a GUI in the writing pad and program code responsive to selection of one of said buttons by the writing pen.

8.A portable fax machine according to claim 1, further comprising a PC software interface for archiving the fax documents and accepting the fax template defined by the user.

9.A dialing method for use in a portable fax machine, comprising the steps of: selecting an area on a writing area of an input device as a dialing area; loading a program for defining the dialing area and processing the signal coming from the dialing area; and triggering the program according to predetermined timing when a writing device contacts the dialing area.

10.A computer program product for use with a portable fax machine, said computer program product comprising: a computer readable medium having a computer readable code embodied in said medium for causing a dialer of a portable fax machine to dial, said computer program product comprising: computer readable program code for selecting an area on a writing area of an input device as a dialing area; computer readable program code for loading a program for defining the dialing area and processing the signal coming from the dialing area; computer readable program code for triggering the program according to predetermined timing when a writing device contacts the dialing area.

11.A computer system comprising:

a pen-based input device, comprising a writing pen and a writing pad, enabling
a user to write documents for fax transmission on the writing pad by means of
the writing pen, wherein said input device is capable of generating data

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[c11]

representative of the moving trace of the pen-based input device and of recording a user"s written input in a strokes data format, each stroke comprising a series of position coordinates of pen-based input device between a pen-down event and a pen-up event;

an encoder for transferring the stroke format data representative of the moving trace of the writing pen into fax data format;

a dialer for inputting the fax number of a destination to set up a connection herewith; and

fax transmission device for transmitting to the destination the data in the fax data format output from the encoding means.

[c12]

12.A method for a computer system, comprising the steps of: selecting an area on a writing area of an input device as a dialing area; loading a program for defining the dialing area and processing the signal coming from the dialing area; and triggering the program according to predetermined timing when a writing device contacts the dialing area.